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EXAMINER	
FLORES, LEON	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,322	JONSSON, ELIAS	
	Examiner	Art Unit	
	LEON FLORES	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-24 and 26-47* is/are rejected.

7)☒ Claim(s) *10, 25, 39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims (1-47) have been considered but are moot in view of the new ground(s) of rejection.

Response to Remarks

Applicant asserts that, *"Bottomley I and "Bottomley II provide ISI suppression and thereby improve received signal quality but they objectively do not teach, suggest, or even hint at how an ISI-canceling receiver can compute a received signal quality that reflects the ISI-canceling performance of the receiver independently from actually carrying out ISI suppression operations on the received signal".*

The examiner respectfully disagrees. The reference of Bottomley I does suggest computing "a received signal quality that reflects the ISI-canceling performance of the receiver (See equation 44) independently from actually carrying out ISI suppression operations on the received signal". (The instant application does teach estimating the received signal quality (SIR) based on the scaled estimate of ISI (See fig. 2: 104). At no point does applicant claims "a received signal quality that reflects the ISI-canceling performance of the receiver independently from actually carrying out ISI suppression operations on the received signal".

Applicant further asserts that, *"the rejection arguments on p. 6 of the Office Action state that Section IV, Equations 43 and 44 of Bottomley I teach the limitation of "estimating the received signal quality based on the scaled estimate of inter-symbol interference." That argument is contradicted by Equation 43 in Bottomley I, which*

calculates received signal quality as a function of an impairment covariance matrix Ru and corresponding "Generalized Rake" combining weights w".

The examiner respectfully disagrees. If we focus on equation 44 one can clearly see that YD, which include the estimated ISI (See equation 20), is scaled by the covariance matrix RU.

Applicant further asserts that, *"notably absent from Equation 43 is any estimate of ISI in the received signal that has been scaled by a scalar value representing characterized or measured ISI cancellation performance of the receiver in question".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"Indeed, Equation 43 of Bottomley I is an example of being able to calculate received signal quality only after the potentially burdensome computation of the covariance matrix Ru , the combining weights w, which the instant invention expressly states that it advantageously avoids".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"the Summary in the instant application at paragraph [0007], where Applicant teaches that, "[b]y accounting for ISI cancellation performance of the receiver based on a simple scaling metric, accurate received signal quality measurements are obtained in a manner that accounts for un-cancelled ISI in the received signal without requiring use of potentially complex multipath combining weight calculations in the signal quality calculations." (Emphasis added.) Paragraph [0067] and other sections in the instant application teach that the claimed signal quality calculations allow an ISI-canceling receiver to compute accurate signal quality*

estimates early within a timeslot, without having to wait for carrying out the potentially complex calculations associated with impairment covariance matrix estimation and combining weight calculations".

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"Equation 7 in Bottomley I does no more than state that a Rake receiver produces received signal symbol detection statistics by combining the despread values from individual Rake fingers using combining weights w. It is immediately apparent to one skilled in the art and easily proven that Equation 7 in no way represents the claimed scaling of estimated ISI".*

The examiner respectfully disagrees. Equation 7 is a mathematical representation figure 2. For example, Y represents the output spreading waveform correlator in figure 2, and it is mathematically shown in equations 8 and 16-20. WH, which is the hermitian of W, represents the input to the multiplier in figure 2, and it is mathematically shown in equations 9 and 20-21.

Applicant further asserts that, *"The Patent Office introduces further serious errors in the factual record by stating on p. 6 that Bottomley I "fails to teach a scalar value corresponding to inter-symbol interference," and then further stating that, "...Bottomley II does." The claimed cancellation metric is a scalar value that represents the inter-symbol interference cancellation performance of a receiver. The claims and specification-as-filed explicitly teach that the cancellation metric is a scalar value that represents the characterized or measured ISI cancellation performance of the receiver--i.e., a scalar value representing the extent to which the receiver cancels ISI--and decidedly is not*

taught as a scalar value representing the actual ISI in a received signal".

The examiner respectfully disagrees. The old set of claims did not disclose "a scalar value that represents the characterized or measured ISI cancellation performance of the receiver". However, taking the contrary, a new ground of rejection has been issued.

Applicant further asserts that, *"Bottomley II teaches the use of ISI factors to generate revised symbol estimates produced by a Rake processor. See, e.g., lines 53-57 of col. 6. The revised symbol estimates yield improved bit error rate performance as compared to the unrevised symbol estimates output by the Rake processormsee Fig. 12 of Bottomley I1. Plainly and unambiguously, Bottomley II does not teach scaling an estimate of ISI in a received signal by its disclosed ISI factors; Rather, Bottomley II expressly teaches revising actual symbol estimates produced by a Rake processor based on its computed ISI factors".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"Bottomley I and Bottomley II, taken alone or in any combination, do not teach or suggest the limitations of the claims at issue. Each independent claim (1, 17, 31, and 45) includes limitations directed to scaling an estimate of the ISI in a received signal using a cancellation metric comprising a scalar value representing characterized or measured ISI cancellation performance of an ISI-canceling receiver. Each independent claim further includes limitations directed to using the resulting scaled estimate of ISI to estimate received signal quality based on the scaled estimate of ISI".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"In rejecting claim 5, the Office Action states on p. 8 that the combination of Bottomley I and Bottomley II teach this limitation. For support the Office refers to Bottomley I, Section II1. Applicant has searched Section III of Bottomley for any teachings related to the limitations of claim 5 and can find no reference to any pre-configured stored value representing a cancellation metric, or anything that is even arguably related. Applicant respectfully requests the Office to particularly point out where Bottomley I is alleged to provide the teachings of claim 5".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"Further, claim 6 includes the limitation of determining the pre-configured value to be used as the cancellation metric based on characterizing the ISI cancellation performance of the ISI-canceling receiver identified in claim 1, or by characterizing another receiver of the same type. Page 8 of the Office Action flatly asserts that Section III of Bottomley I teaches the limitations of claim 6. Again, Applicant has scoured Section III of Bottomley I and can find no teachings remotely related to claim 6. Applicant respectfully requests that the Patent Office identify where Bottomley I is alleged to teach characterizing an ISI-canceling receiver to determine the value of a cancellation metric to be pre-stored as a scalar value in the memory of an ISI-canceling receiver. Applicant submits that these teachings are entirely absent from the reference".*

The examiner agrees. However, a new ground of rejection has been issued.

Applicant further asserts that, *"claim 7 includes the limitation of dynamically*

determining the claimed cancellation metric based on measuring the ISI cancellation performance of the receiver during operation. Page 8 of the Office Action flatly asserts that Section III of Bottomley I (Subsection B: Combining weights and finger delays) teaches the limitations of claim 7. More particularly, the Patent Office states without explanation that one skilled in the art would know that combining weights and finger delays can be updated to dynamically account for time-varying channel impairments. However accurate that observation may be, it is completely irrelevant to the claimed limitation of dynamically maintaining a cancellation metric meant to represent the ISI cancellation performance of a received, based on measuring its ISI cancellation performance during operation".

The examiner agrees. However, a new ground of rejection has been issued.

Applicant finally asserts that, *"Regarding claim 15, Applicant claims "storing a cancellation metric for each of one or more supporting network transmitters, and wherein "scaling the estimated inter-symbol interference by a cancellation metric..." comprises "scaling an estimated inter-symbol interference estimate for each of the one or more network transmitters by the corresponding cancellation metric." Remarkably, the Office Action on p. 11 asserts Bottomley II, Equations 8- 11 and Bottomley I, Section III and Fig. 2, teach this limitation. Equations 8-11 in Bottomley II have nothing to do with different supporting network transmitters, nor does anything in either Bottomley I or II even hint at storing different metrics of any type for any purpose, in correspondence to respective supporting network transmitters. There is not the first shred of support for this rejection in either Bottomley I or Bottomley II".*

The examiner agrees. However, a new ground of rejection has been issued.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims (1-9, 11-24, 26-38, 40-47) are rejected under 35 U.S.C. 103(a) as being unpatentable over Bottomley et al. (hereinafter Bottomley), *"A Generalized RAKE Receiver for Interference Suppression"*, IEEE Journal on selected areas in communications, Vol. 18, No. 8, August 2000, in view of Reznik. (US Publication 2003/0053526 A1)**

Re claim 1, Bottomley discloses a method of determining received signal quality for a received signal in an inter-symbol interference canceling receiver comprising: generating an estimate of inter-symbol interference in the received signal. (See section III: B, "Combining weights and finger delays", see figure 2 and equations 8, 16, 18, 20

"Y_{ISI}")

Although the reference of Bottomley does teach scaling the estimated inter-symbol interference by a cancellation metric (See equations 7, 9, 41 "the suppression of interference can be seen by applying the weights to the interference components of Y(mTC)), the reference of Bottomley fails to explicitly teach scaling the estimated inter-symbol interference by a cancellation metric comprising a scalar value representing characterized or measured inter-symbol interference cancellation performance of the receiver.

However, Reznik does. (See fig. 9: 39 "Matrix S" & ¶s 75, 95 "cancellation of inter-symbol interference or ISI") The reference of Reznik suggests scaling the estimated inter-symbol interference by a cancellation metric (See equation 10 "Matrix S") comprising a scalar value representing characterized or measured inter-symbol interference cancellation performance of the receiver. (See equation 10 "Matrix S" & claim 49 "Matrix S such that said scaling performs cancellation of inter-symbol interference ISI")

Therefore, taking the combined teachings of Bottomley and Reznik as a whole, it would have been obvious to one of ordinary skills in the art to have incorporated this feature into the system of Bottomley, in the manner as claimed and as taught by Reznik, for the benefit of suppressing inter-symbol interference at the receiver using a scalar value.

The combination of Bottomley and Reznik discloses the limitations as claimed above, except they fail to explicitly teach estimating the received signal quality based on

the scaled estimate of inter-symbol interference.

However, the reference of Reznik does suggest estimating the received signal quality based on the scaled estimate of inter-symbol interference.(See figs. 9-11 & ¶s 77 & 101 "soft-decision", "hard-decision", and equation 10. Furthermore, it would have necessitated the measurement of the SIR in order to determine if the interference has been suppressed.)

Therefore, it would have been obvious to one of ordinary skills in the art to incorporate this feature into the system of Bottomley, as modified by Reznik, in the manner as claimed, for the benefit of improving the quality of the received signal.

Re claim 2, the combination of Bottomley and Reznik further discloses that wherein estimating the received signal quality based on the scaled estimate of inter-symbol interference comprises estimating a signal-to-interference ratio of the received signal. (In Bottomley, see section IV)

Re claim 3, the combination of Bottomley and Reznik further discloses that periodically estimating the signal-to-interference ratio of the received signal and periodically transmitting corresponding channel quality information to a supporting wireless communication network. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Re claim 4, the combination of Bottomley and Reznik further discloses that periodically estimating the signal-to-interference ratio of the received signal, generating corresponding link power control commands, and transmitting the link power control commands to a supporting wireless communication network. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Re claim 5, the combination of Bottomley and Reznik fail to disclose storing the cancellation metric in a memory of the receiver as a pre-configured value.

However, the reference of Reznik does suggest (See fig. 9 "Split Matrix O into Matrices T and S" & ¶ 75) storing the cancellation metric in a memory of the receiver as a pre-configured value. (One skilled in the art would know that Matrix S is pre-computed prior to cancelling the inter-symbol interference.)

Therefore, it would have been obvious to one of ordinary skills in the art to incorporate these features into the system of Bottomley, as modified by Reznik, for the benefit of cancelling intersymbol interference.

Re claim 6, the combination of Bottomley and Reznik further discloses that determining the pre-configured value of the cancellation metric by characterizing inter-symbol interference cancellation performance of the receiver, or of a same type of receiver. (In Reznik, see fig. 9: 39 & ¶ 75)

Re claim 7, the combination of Bottomley and Reznik fails to disclose that maintaining the cancellation metric as a dynamically updated value based on inter-symbol interference cancellation performance of the receiver as measured during operation.

However, the reference of Reznik does suggest maintaining the cancellation metric as a dynamically updated value based on inter-symbol interference cancellation performance of the receiver as measured during operation. (See ¶s 75-81 "the cancellation is done iteratively". Furthermore, Matrices S and T are computed based on channel conditions. (See equation 3))

Therefore, it would have been obvious to one of ordinary skills in the art to incorporate these features into the system of Bottomley, as modified by Reznik, for the benefit of cancelling intersymbol interference.

Re claim 8, the combination of Bottomley and Reznik further discloses that wherein the received signal comprises a WCDMA Dedicated Physical Channel (DPCH) signal, and wherein determining received signal quality for a received signal in an inter-symbol interference canceling receiver comprises, for each timeslot of the DPCH signal, estimating the received signal quality based on the scaled estimate of inter-symbol interference, generating a corresponding transmit power control command, and transmitting the power control command to a supporting WCDMA network. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that

WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Re claim 9, the combination of Bottomley and Reznik further discloses that, wherein generating an estimate of inter-symbol interference in the received signal comprises generating an expected value of the inter-symbol interference in the received signal. (In Bottomley, see section III: B, "Combining weights and finger delays", equation 22.)

Re claim 11, the combination of Bottomley and Reznik further discloses that, wherein estimating the received signal quality based on the scaled estimate of inter-symbol interference comprises estimating a received signal power for the received signal, estimating an additional impairment component of the received signal corresponding to other than inter-symbol interference, and calculating the signal-to-interference ratio of the received signal as a ratio of the received signal power over a sum of the scaled estimate of inter-symbol interference and the additional impairment component. (In Bottomley, see section III: B, "Combining weights and finger delays" & section IV.)

Re claim 12, the combination of Bottomley and Reznik further discloses that, wherein the received signal power, the scaled estimate of inter-symbol interference, and the additional impairment component, are estimated using combined values corresponding to RAKE fingers in the receiver that are associated with the received

signal. (In Bottomley, see section III: B, "Combining weights and finger delays".)

Re claim 13, the combination of Bottomley and Reznik further discloses that, wherein estimating a received signal power for the received signal comprises calculating the received signal power based on the magnitudes of net channel responses and signal amplitudes for propagation paths associated with the received signal. (In Bottomley, see section III: B, "Combining weights and finger delays".)

Re claim 14, the combination of Bottomley and Reznik further discloses that, wherein estimating an additional impairment component of the received signal corresponding to other than inter-symbol interference comprises estimating an interference variance based on received pilot channel symbols. (In Bottomley, see section III: B, "Combining weights and finger delays".)

Re claim 15, the combination of Bottomley and Reznik fail to disclose storing a cancellation metric for each of one or more supporting network transmitters, and wherein scaling the estimated inter-symbol interference by a cancellation metric comprising a scalar value representing characterized or measured inter-symbol interference cancellation performance of the receiver comprises scaling an estimated inter-symbol interference estimate for each of the one or more network transmitters by the corresponding cancellation metric.

However, the reference of Reznik does suggest storing a cancellation metric for

each of one or more supporting network transmitters, and wherein scaling the estimated inter-symbol interference by a cancellation metric comprising a scalar value representing characterized or measured inter-symbol interference cancellation performance of the receiver (In Reznik, see fig. 9: 39 & ¶s 75, 95 "cancellation of inter-symbol interference or ISI". One skilled in the art would know that the values of the cancellation matrix S depend on the channel characteristics, and these values will change whenever the condition of the channel changes. Therefore, one can safely say that these values are stored) comprises scaling an estimated inter-symbol interference estimate for each of the one or more network transmitters by the corresponding cancellation metric. (In Reznik, see fig. 9: 39 & ¶s 75, 95 "cancellation of inter-symbol interference or ISI" & ¶ 66 "a plurality of users" "CDMA")

Therefore, it would have been obvious to one of ordinary skills in the art to incorporate these features into the system of Bottomley, as modified by Reznik, for the benefit of cancelling intersymbol interference.

Re claim 16, the combination of Bottomley and Reznik further discloses that determining the cancellation metric based on generating a combined estimate for inter-symbol interference and other impairment in the received signal and removing a noise variance estimate corresponding to the other impairment from the combined estimate to obtain the cancellation metric. (In Bottomley, see section III: B, "Combining weights and finger delays".)

Claim 17 is a system claim corresponding to method claim 1. Hence, the steps performed in method claim 1 would have necessitated the elements in system claim 17. Therefore, claim 17 has been analyzed and rejected w/r to claim 1.

Claim 18 is a system claim corresponding to method claim 2. Hence, the steps performed in method claim 2 would have necessitated the elements in system claim 18. Therefore, claim 18 has been analyzed and rejected w/r to claim 2.

Claim 19 is a system claim corresponding to method claim 3. Hence, the steps performed in method claim 3 would have necessitated the elements in system claim 19. Therefore, claim 19 has been analyzed and rejected w/r to claim 3.

Claim 20 is a system claim corresponding to method claim 4. Hence, the steps performed in method claim 4 would have necessitated the elements in system claim 20. Therefore, claim 20 has been analyzed and rejected w/r to claim 4.

Claim 21 is a system claim corresponding to method claim 5. Hence, the steps performed in method claim 5 would have necessitated the elements in system claim 21. Therefore, claim 21 has been analyzed and rejected w/r to claim 5.

Claim 22 is a system claim corresponding to method claim 7. Hence, the steps performed in method claim 7 would have necessitated the elements in system claim 22.

Therefore, claim 22 has been analyzed and rejected w/r to claim 7.

Claim 23 is a system claim corresponding to method claim 8. Hence, the steps performed in method claim 8 would have necessitated the elements in system claim 23. Therefore, claim 23 has been analyzed and rejected w/r to claim 8.

Claim 24 is a system claim corresponding to method claim 9. Hence, the steps performed in method claim 9 would have necessitated the elements in system claim 24. Therefore, claim 24 has been analyzed and rejected w/r to claim 9.

Claim 26 is a system claim corresponding to method claim 11. Hence, the steps performed in method claim 11 would have necessitated the elements in system claim 26. Therefore, claim 26 has been analyzed and rejected w/r to claim 11.

Claim 27 is a system claim corresponding to method claim 12. Hence, the steps performed in method claim 12 would have necessitated the elements in system claim 27. Therefore, claim 27 has been analyzed and rejected w/r to claim 12.

Re claim 28, the combination of Bottomley and Reznik further discloses that wherein the processing circuit comprises at least a portion of an integrated circuit device that is arranged and configured for baseband signal processing in a wireless communication receiver. (In Bottomley, see fig. 2)

Claim 29 is a system claim corresponding to method claim 15. Hence, the steps performed in method claim 15 would have necessitated the elements in system claim 29. Therefore, claim 29 has been analyzed and rejected w/r to claim 15.

Re claim 30, the combination of Bottomley and Reznik further discloses that, wherein the one or more supporting network transmitters are associated with different network cells, and wherein the processing circuit estimates and scales inter-symbol interference on a per cell basis. (In Bottomley, see section III: B, "Combining weights and finger delays".)

Claim 29 is a system claim corresponding to method claim 15. Hence, the steps performed in method claim 15 would have necessitated the elements in system claim 29. Therefore, claim 29 has been analyzed and rejected w/r to claim 15.

Claim 31 is a system claim corresponding to method claim 1. Hence, the steps performed in method claim 1 would have necessitated the elements in system claim 31. Therefore, claim 31 has been analyzed and rejected w/r to claim 1. Furthermore, the system described in this reference is a CDMA-based system.

Claim 32 is a system claim corresponding to method claim 2. Hence, the steps performed in method claim 2 would have necessitated the elements in system claim 32.

Therefore, claim 32 has been analyzed and rejected w/r to claim 2.

Claim 33 is a system claim corresponding to method claim 3. Hence, the steps performed in method claim 3 would have necessitated the elements in system claim 33. Therefore, claim 33 has been analyzed and rejected w/r to claim 3.

Claim 34 is a system claim corresponding to method claim 4. Hence, the steps performed in method claim 4 would have necessitated the elements in system claim 34. Therefore, claim 34 has been analyzed and rejected w/r to claim 4.

Claim 35 is a system claim corresponding to method claim 5. Hence, the steps performed in method claim 5 would have necessitated the elements in system claim 35. Therefore, claim 35 has been analyzed and rejected w/r to claim 5.

Claim 36 is a system claim corresponding to method claim 7. Hence, the steps performed in method claim 7 would have necessitated the elements in system claim 36. Therefore, claim 36 has been analyzed and rejected w/r to claim 7.

Claim 37 is a system claim corresponding to method claim 8. Hence, the steps performed in method claim 8 would have necessitated the elements in system claim 37. Therefore, claim 37 has been analyzed and rejected w/r to claim 8.

Claim 38 is a system claim corresponding to method claim 9. Hence, the steps performed in method claim 9 would have necessitated the elements in system claim 38. Therefore, claim 38 has been analyzed and rejected w/r to claim 9.

Claim 40 is a system claim corresponding to method claim 11. Hence, the steps performed in method claim 11 would have necessitated the elements in system claim 40. Therefore, claim 40 has been analyzed and rejected w/r to claim 11.

Claim 41 is a system claim corresponding to method claim 12. Hence, the steps performed in method claim 12 would have necessitated the elements in system claim 41. Therefore, claim 41 has been analyzed and rejected w/r to claim 12.

Re claim 42, the combination of Bottomley and Reznik further discloses that, wherein the device comprises a mobile terminal configured for operation in a WCDMA wireless communication network, and wherein the device is configured to determine the received signal quality via use of the processing circuit for one or more received WCDMA signal transmitted by the network. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Re claim 43, the combination of Bottomley and Reznik further discloses that, wherein the mobile terminal is configured periodically to report Channel Quality

Information for a High Speed Packet Data Service signal transmitted by the network based on determining received signal quality for the signal via the processing circuit. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Re claim 44, the combination of Bottomley and Reznik further discloses that, wherein the mobile terminal is configured periodically to transmit forward link power control commands to the network based on determining received signal quality via the processing circuit for one or more WCDMA signals transmitted by the network. (In Bottomley, see sections I & IV. Furthermore, one skilled in the art would know that WCDMA require mobile terminals to compute received signal quality and transmit TCP commands back to the Base station.)

Claim 45 has been analyzed and rejected w/r to claim 1 above. Furthermore, the steps performed in method claim 1 would have necessitated a computer readable medium to store the computer program or instructions.

Claim 46 has been analyzed and rejected w/r to claim 11 above. Furthermore, the steps performed in method claim 11 would have necessitated a computer readable medium to store the computer program or instructions.

Claim 47 has been analyzed and rejected w/r to claim 12 above. Furthermore, the steps performed in method claim 12 would have necessitated a computer readable medium to store the computer program or instructions.

Allowable Subject Matter

4. Claims (10, 25, 39) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nielsen. (US Publication 2002/0080863 A1)

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEON FLORES whose telephone number is (571)270-1201. The examiner can normally be reached on Mon-Fri 7-5pm Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. F./
Examiner, Art Unit 2611
June 5, 2008

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